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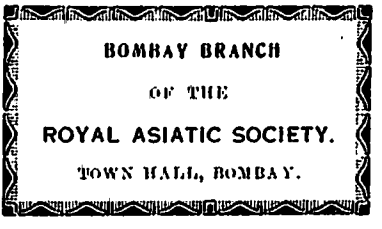

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Administration Report

of the

Public Works Department in the Bombay Presidency

For the Year 1923-24

PART I

With a detailed review of the Civil & Military Works

(PART II—Irrigation works with accounts and statistical statements is issued separately)

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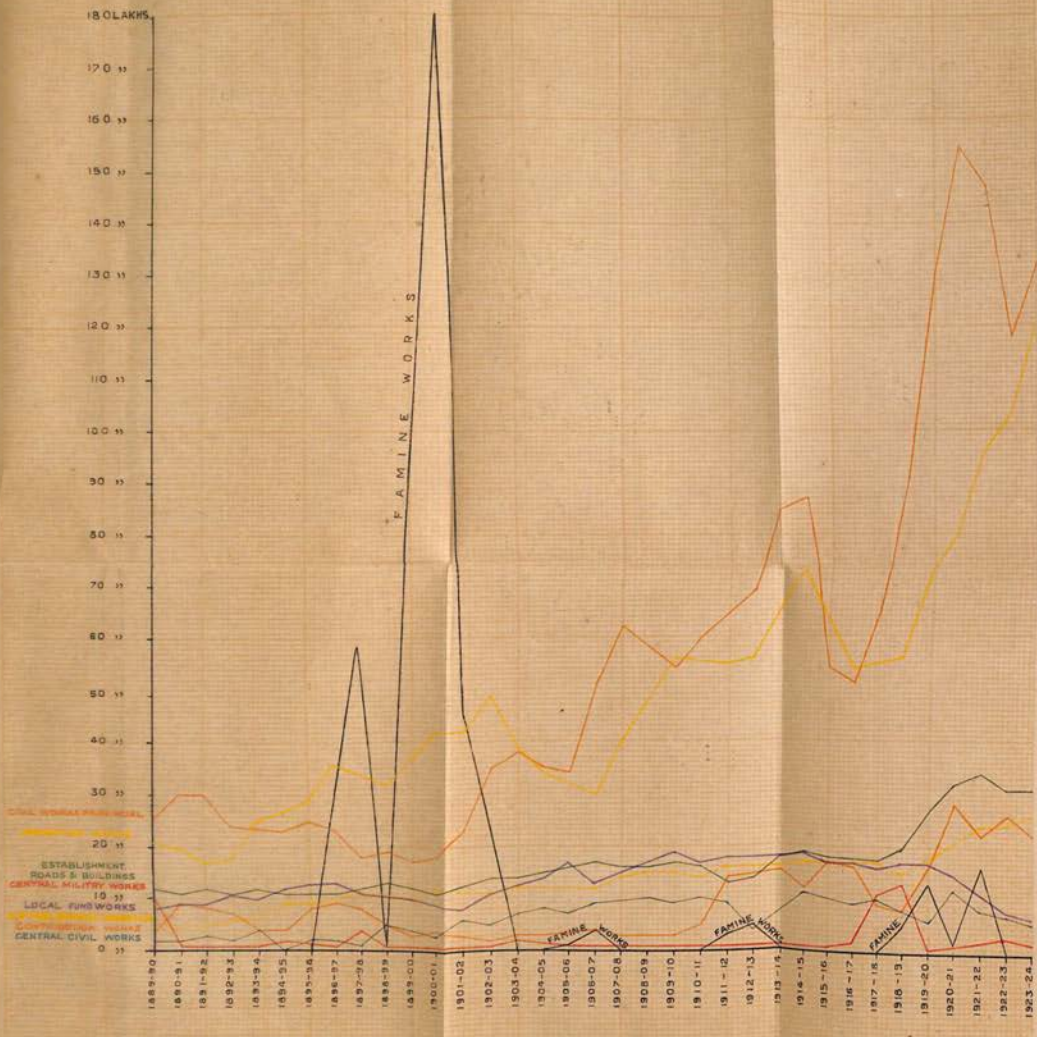
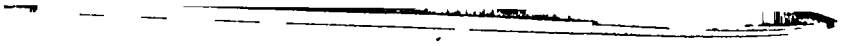
DIAGRAM
SHOWING
PUBLIC WORKS EXPENDITURE





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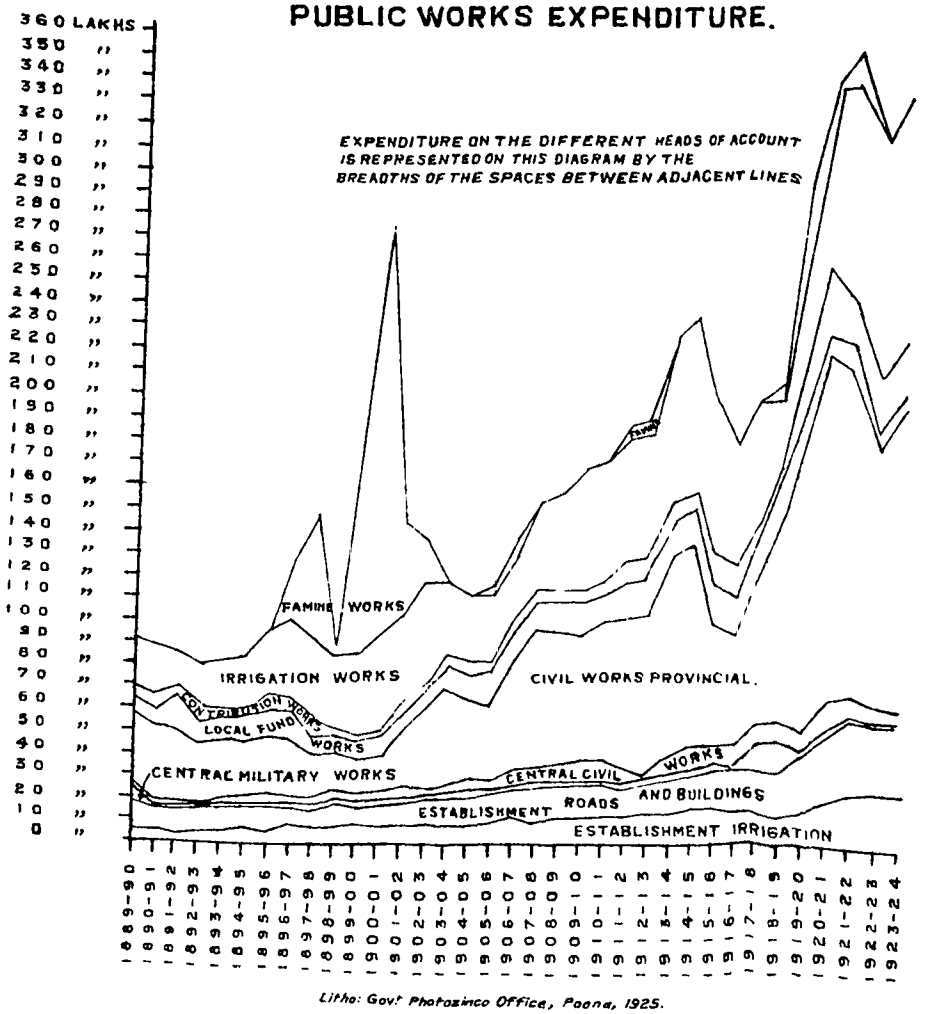

Litho: Govt Photozinco Office, Poona, 1925.

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PUBLIC WORKS DEPARTMENT.

BOMBAY PRESIDENCY.

ADMINISTRATION REPORT WITH A DETAILED REVIEW OF THE CIVIL AND MILITARY WORKS FOR THE YEAR 1923-24.

I.—DIRECTION.

During the year under report Mr. E. M. Proes, C.S.I., continued as Chief Engineer and Secretary to Government and Mr. R. T. Harrison as Chief Engineer for Irrigation and Joint Secretary to Government. The former, however, proceeded on long leave preparatory to retirement on 17th February 1924 and Mr. Harrison then acted as Secretary to Government till he proceeded on leave on 29th March 1924. Mr. K. S. Framji, B.A., L.C.E., was first appointed to act as Chief Engineer, Roads and Buildings and Joint Secretary to Government on Mr. Proes' departure on leave and subsequently as Secretary to Government after Mr. Harrison left and Mr. V. M. Griffiths was appointed to act as Chief Engineer for Irrigation and Joint Secretary to Government.

2. The services of Mr. F. St. J. Gebbie, C.I.E., which were temporarily placed at the disposal of the Government of Bombay were replaced at the disposal of the Government of India in April 1923. He was, however, permanently taken up by the Government of India from 1st June 1923 for employment as their Consulting Engineer.

3. The notable event that took place during the year was that the project for the gigantic Barrage at Sukkur, which is estimated to cost over Rs. 18 crores, received the technical and financial sanction of the Secretary of State for India and thereafter the approval of the Legislative Council of the Government of Bombay. The appointment of the Superintending Engineer, Sukkur Barrage, which was created as a temporary measure for carrying out preliminary surveys in connection with that project was held in abeyance and with a view to starting the multifarious operations systematically and expeditiously under that scheme, the appointments of one Chief Engineer, six Superintending Engineers and 30 Executive Engineers were created for two years in the first instance with effect from 1st July 1923. Mr. C. S. C. Harrison was appointed to act as Chief Engineer and the whole scheme was placed under his charge with certain special powers in the matter of making temporary appointments, etc., in order to facilitate the progress of the work. The formal inauguration ceremony was performed by His Excellency Sir George Lloyd in October 1923, and the scheme was named "The Lloyd Barrage and Canal Construction Works". It was divided into six Circles and 30 Executive charges. Out of the six Circles the following five were

opened during the year under report and the undermentioned officers were appointed to act as Superintending Engineers of the Circles as noted against each :—

Circle.	Name.
North Western Circle.	Mr. D. R. Satarawalla, L.C.E.
Rohri Canal Circle ..	Mr. S. C. Mould.
Eastern Nara Circle ..	Mr. D. R. Sawhney.
Western Circle ..	Mr. R. B. MacLachlan, A.M. Inst, C.E.
Sukkur Barrage Circle.	Mr. A. A. Musto, C.I.E., M. Inst. C.E.

4. Mr. A. B. de Souza, Superintending Engineer, was granted twenty-eight months' leave in May 1923 and permitted to retire from the service at the end thereof and Mr. C. B. Pooley was appointed to act in his place as Superintending Engineer, Deccan Irrigation Division. The latter officer proceeded on six months' leave in March 1924 and was succeeded by Mr. D. R. H. Browne, on reversion from the Development Department as acting Superintending Engineer, Deccan Irrigation Division. Similarly Mr. C. J. Hansoti was granted combined leave in July 1923 with permission to retire from the service at the end thereof and Mr. A. X. Moraes, L.C.E., was appointed to act in his place as Superintending Engineer, Northern Division. During Mr. Framji's acting appointment in the Secretariat as Chief Engineer from February 1924, Mr. A. H. Whyte was appointed to act as Superintending Engineer, Central Division, and Mr. J. A. W. Cooper, M. Inst. C.E., etc., was appointed to act as Superintending Engineer, Southern Division, when Mr. Griffiths was transferred to the Secretariat in March 1924. The Deccan Irrigation Division was made a permanent charge with effect from 15th October 1922.

5. During the absence on leave of Mr. A. P. Maddocks, B. Sc.(Birmn.), M. Inst. C.E., etc., Sanitary Engineer to Government, Mr. P. N. Natesha Ayyar was appointed to act as Sanitary Engineer to Government. Mr. F. O. J. Roose, M.I.M.E., M.I.E.E., F.C.S., Electrical Engineer to Government, was granted leave on average pay for eight months from 15th March 1924 and Mr. F. W. Wilson appointed to act in his place.

II.—ADMINISTRATIVE MEASURES.

6. The appointment of Mechanical Engineer to Government which was held in abeyance since the year 1919 owing to the transfer of the Public Works Department Central Store and Workshops at Dapuri and of the services of Mr. G. H. Thiselton Dyer to the Department of Industries was resuscitated from 1st April 1923 and Mr. Thiselton Dyer was appointed to it. The Public Works Department Central Store and Workshops at Dapuri, together with the staff, was also retransferred to the Public Works Department.

7. The deputations of Mr. J. B. S. Thubron, C. I. E., to the Marine Department, Mr. W. L. C. Trench, B. A., I. M. Inst. C. E., to the Educational Department, Mr. E. M. Duggan, B. Sc. (Eng.), A. M. Inst. C. E., to the

Political Department and Mr. T. S. Pipe, B.Sc., M.Inst. C.E., to the Revenue (Forest) Department were continued during the year.

8. Other important events during the year among the superior engineering staff were as follows :—

Messrs. A. Nazareth, S. R. Perfect and J. E. MacDougall, Executive Engineers, were granted long leave with permission to retire at the end thereof, the latter two on proportionate pension. Messrs. H.H. M. Spink, A.M.I.C.E., B. Sc., Rao Bahadur V. N. Parulekar and Rao Bahadur S. V. Rajadhyaksha retired from the service during the year. The special duty of Mr. N. N. Ayyangar, L.C.E., in the Public Works Department, Secretariat, in connection with the revision of the Marryat's Specifications was terminated and the services of Mr. G. N. Gokhale, L.C.E., B.Sc., A. M. I. E.(Ind.), were placed at the disposal of the Sind Collegiate Board for employment as Principal, Nadirshaw Eduljee Dinshaw Civil Engineering College, Karachi. Mr. D. R. Sawhney's services were placed at the disposal of Malirkotla Durbar for employment as State Engineer and Secretary in charge of the Department of Public Works and Industries. He, however, reverted to the Public Works Department in October 1923. Two Assistant Executive Engineers, Messrs. C. J. Rae, B.E. (Civil), H. P. Mathrani, B.Sc. (Eng.), Edin., were sent out during the year by the Secretary of State for the Europe-recruited branch of the Indian Service of Engineers and Mr. P. Braganza, Assistant Engineer, was promoted from the Bombay Engineering Service to the India-recruited branch to which two Apprentice Engineers were also appointed from the College of Engineering, Poona. The services of Mr. E. C. Whittle, temporary Engineer, were lentto the General Department for appointment as Special Engineer in Kamaran Lazaretto.

9. The services of Mr. R. Duckett, Assistant to the Consulting Architect to Government, were dispensed with in January 1924 as he absented himself without leave and left India.

10. In addition to the four Assistant Engineers already under deputation, the services of Mr. B. P. Jagtap, L.C.E., were lent for five years to the Kolhapur State for employment as its Chief Engineer.

11. Twenty-two appointments were made to the Bombay Engineering service during the year by promotion from the permanent upper subordinate establishment. Six apprentices from the College of Engineering, Poona, including three for the previous year, were appointed to the Bombay Engineering Service in accordance with the revised guarantee given to that College. Certain temporary upper-subordinates were brought on the permanent establishment with a view to making up the shortage in the sanctioned strength of the upper subordinate establishment. Two Assistant Engineers retired and two were permanently transferred to the Educational Department.

III.—TERRITORIAL CHANGES.

12. In consequence of retrenchment in expenditure, three executive charges, *viz.*, Kolaba, Gujarat Irrigation and Architectural were abolished and works in them were amalgamated in the adjoining districts.

13. The continuance of the Pravara Canals District, the Government House District and the Perisan Gulf District was sanctioned by the Government of India and the period of the Malsiras, Lonand and Lake Whiting Districts in the Deccan Irrigation Division was extended for four years from 1st January 1923.

Sind.

14. For the Lloyd Barrage and Canals Construction, 40 temporary sub-divisions were created during the year under review.

Northern Division.

15. On the abolition of the Gujarat Irrigation District the Hathmati and Khari Cut Canal Sub-division and the Tank Sub-division were amalgamated with the Ahmedabad District whilst the Kaira Sub-division and the Panch Mahals sub-division were merged in the Kaira and Panch Mahals District. The Rajkot Sub-division which was amalgamated with the Viramgaon Sub-division was reopened at the request of the Military Authorities.

Deccan Irrigation Division.

16. The continuance of the Malsiras and Nateputa Sub-divisions in the Malsiras District, Andhori and Nimblak Sub-divisions in the Lonand District, and Bhatghar Lime Supply, South Bank and Mechanical Sub-divisions in the Lake Whiting District was sanctioned up to the 31st December 1926. In the Lonand District, the Andhori and Nimblak Sub-divisions were reconstituted and a new Sub-division called the Head Works Sub-division was formed. In the Nasik Irrigation District, the Bandhara Sub-division was sanctioned as a permanent charge with effect from 1st January 1924 and the Lake Arthur Hill and the Lime Supply Sub-divisions were ordered to be continued upto 31st March 1925.

The project Sub-division in the Malsiras District and the Mutha Right Bank Canal Development Sub-division in the Special Irrigation District were allowed to continue upto 28th February 1925 and 31st May 1926 respectively.

Central Division.

17. Certain Provincial works were handed over to the District Local Board, Ahmednagar, for maintenance for 3 years as an experimental measure. Owing to the transfer of these works two Sub-divisions in the Ahmednagar District, namely, Shevgaon and Shrigonde were abolished.

Southern Division.

18. The Central Prison at Hindalgi having been completed, the temporary Hindalgi Sub-division was abolished. The Gadag Sub-

division of the Dharwar District was amalgamated with the Hubli and Haveri Sub-divisions. Owing to the abolition of the Kolaba District, the Mahad Sub-division was added to the Ratnagiri District. The Sub-divisions in the Belgaum District were reconstituted. The Khanapur Sub-division was abolished and the Gokak Canal Sub-division was transferred from the Belgaum to the Dharwar Irrigation District.

ELECTRICAL ENGINEER.

19. The continuance of the combined Store and Workshop Sub-division from 1st April 1923 to 31st March 1925 was sanctioned.

MISCELLANEOUS.

20. Owing to the work on the Lloyd Barrage and Canals Construction having been started several members of the different classes of permanent establishments (Engineer, Upper and Lower Subordinate, Clerical, etc.) had to be transferred from other Divisions and their places were filled up by temporary men.

21. Besides the above, several other orders of comparatively minor importance, such as the further revision of the Store-keepers and of the Consulting Architect's clerical establishment, the grant of free housing accommodation and of certain allowances to the officers and subordinates employed on the Lloyd Barrage Works, etc., were also issued during the year.

IV.—DETAILED REVIEW.

A.—CIVIL BUILDINGS.

During the period under review the Roads and Buildings Branch of the Public Works Department of the Presidency executed works, the total expenditure on which was Rs. 2,10,56,704 and the more important details are given under the various heads below :—

Imperial Services.

	Rs.
Customs—	
On new works and additions and alterations to existing works	17,624
On repairs	42,125
Total ..	59,749
Salt—	
On new works and additions and alterations to existing works	1,79,004
On repairs	71,463
Total ..	2,50,467

Certain buildings in connection with the salt works at Kanjur site, Thana Creek site, Bhandup site and Mulund site in the Thana District were completed. The road from Dharasna to Chharwada Salt Works, which was in progress during the previous year, was completed. The provision of teakwood shutters to the manholes and cisterns of the water supply pipe line in the New Agar and of wooden supports to the overhead pathway to the new open Salt staging at Kharaghoda was completed.

	Rs.
Opium—	
On repairs	199
Excise—	
On repairs	148
Audit—	
On repairs	996
Administration of Justice—	
On repairs	301
Jails and Convict Settlements District Jails—	
On works	2,560
On repairs	3,045
Total ..	5,605
Police—	
On new works and additions and alterations to existing works	5,015
On repairs	10,734
Total ..	15,749
Ports and Pilotage—	
On repairs	394
Ecclesiastical—	
On new works and additions and alterations to existing works	16,295
On repairs	51,128
Total ..	67,423
Political—	
On additions and alterations	8,857
On repairs	40,677
Total ..	49 534

		Rs.
Scientific Department : Meteorological—		
On additions and alterations		5,419
On repairs		4,598
Total ..		10,017
Educational—		
On repairs		129
Medical—		
On repairs		1,594
Aviation—		
On repairs		82
Mint—		
On additions and alterations		2,488
On repairs		6,992
Total ..		9,480
Currency Buildings—		
On works		1,736
On repairs		8,496
Total ..		10,232
Civil Works—		
On repairs		1,191
Communications—		
On repairs		3,193
Miscellaneous—		
On repairs		488
**Post Offices—*		
On additions and alterations		58,392
On repairs		59,240
Total ..		1,17,632

*From the year 1921-22 the expenditure on Post and Telegraph buildings has been transferred to the Accountant General, Posts and Telegraphs.

**Telegraphs—*

	Rs.
On new works and additions and alterations to existing works	1,65,572
On repairs	28,900
Total ..	1,94,472

The reconstruction of the Telegraph Office at Ahmedabad on the site of the old Telegraph Office, destroyed in the riots of 1919, was in progress. The construction of a new Telephone Exchange building at Pona was completed.

Archæological—

On Works	65,590
On repairs	1,14,548
Total ..	48,958

Certain repairs to the Kevda Masjid and Khajuri Masjid at Champaner and conserving Galteshwar Mahadeo's temple at Sarnal in the Kaira and Panch Mahals District were in progress. Special repairs to the Khan Masjid at Dholka and the work of dismantling the citadel wall of the Sidi Sayad's mosque at Ahmedabad were in progress.

Military Works—

On new works and additions and alterations to existing works	40,730 (*a*) 5,000
On repairs	1,26,298
Total ..	1,67,028 (*a*)5,000

(*a*) Adjustment communicated in the 3rd Supplementary account for March 1923 not accepted during the year 1922-23.

Provincial Service.

	Rs.
Land Revenue—	
On works	6,999
On repairs	1,543
Total ..	8,542

* From the year 1921-22 the expenditure on Post and Telegraph buildings has been transferred to the Accountant General, Posts and Telegraphs and that on Archæological Works to the Accountant General, Central Revenues.

Excise buildings—

	Rs.
On new works and additions and alterations to existing works	58,807*
On repairs	27,809
Total ..	86,616

New buildings were constructed for the Excise establishment in the Belgaum, Bijapur, Ratnagiri and Kanara districts. A bungalow was purchased for the residence and office of the Superintendent of Excise at Ratnagiri. The Liquor Warehouse at Nandurbar in the West Khandesh District is still incomplete as regards water supply. Borings were taken to a depth of 200′ in the wells but no water has yet been tapped. Further proposals regarding the improvement of the water supply are therefore under consideration.

Forests—	Rs.
On works	8,958†
On repairs	4,561
Total ..	13,519

Registration—	
On works	3,510
On repairs	231
Total ..	3,741

General Administration—

(1) Residences for Heads of Provinces.

	Rs.
On new works and additions and alterations to existing works	59,853
On repairs	2,83,730
Total ..	3,43,583

Quarters for ten Indian married subordinates at Government House, Ganeshkhind, were completed.

(2) Provincial Legislative Councils.

	Rs.
On works	4,239
On repairs	2,796
Total ..	7,035

*Includes Rs. 16,599 expenditure incurred under 60, Civil Works.

†Includes Rs. 4,820 expenditure incurred under 60, Civil Works.

(3) SECRETARIAT AND HEAD QUARTERS ESTABLISHMENT INCLUDING LOCAL FUND AUDIT ESTABLISHMENT.

	Rs.
On new works and additions and alterations to existing works	59,955*
On repairs	38 638
Total ..	98,593

(4) COMMISSIONERS AND DISTRICT OFFICERS.

	Rs.
On new works and additions and alterations to existing works	8,24,086†
On repairs	2,06,765
Total ..	10,30,851

Three flats on the Rocky Hill site, Malabar Hill, Bombay, originally constructed for the Development Department Directorate were purchased to accommodate Government officers. The New Revenue Buildings at Palghar in the Thana District were completed. The construction of 13 bungalows for Government officers at Kopri, Thana, was in progress. The construction of bungalows for Government officers at Ahmedabad and new Revenue Offices at Karachi were completed.

Administration of Justice—

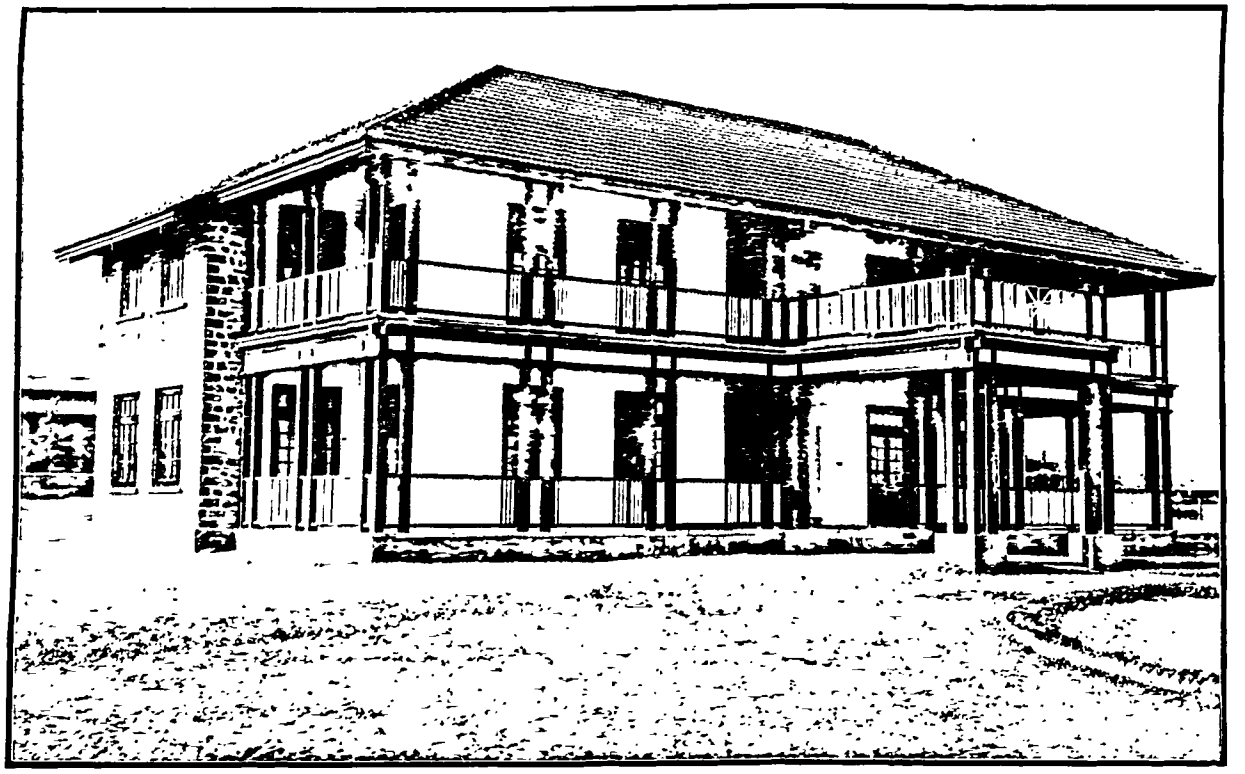
	Rs.
On new works and additions and alterations to existing works	3,38,076‡
On repairs	1,12,860
Total ..	4,50,936

The construction of District and Sessions Courts, Small Causes Courts, First and Second Class subordinate courts at Poona was completed up to plinth level. The Sub-Judge's Court house at Koregon in the Satara District and the Pleaders' Chambers in the compound of the District Court, Ahmedabad, were in progress. The construction of Judicial courts at Karachi was completed up to plinth level.

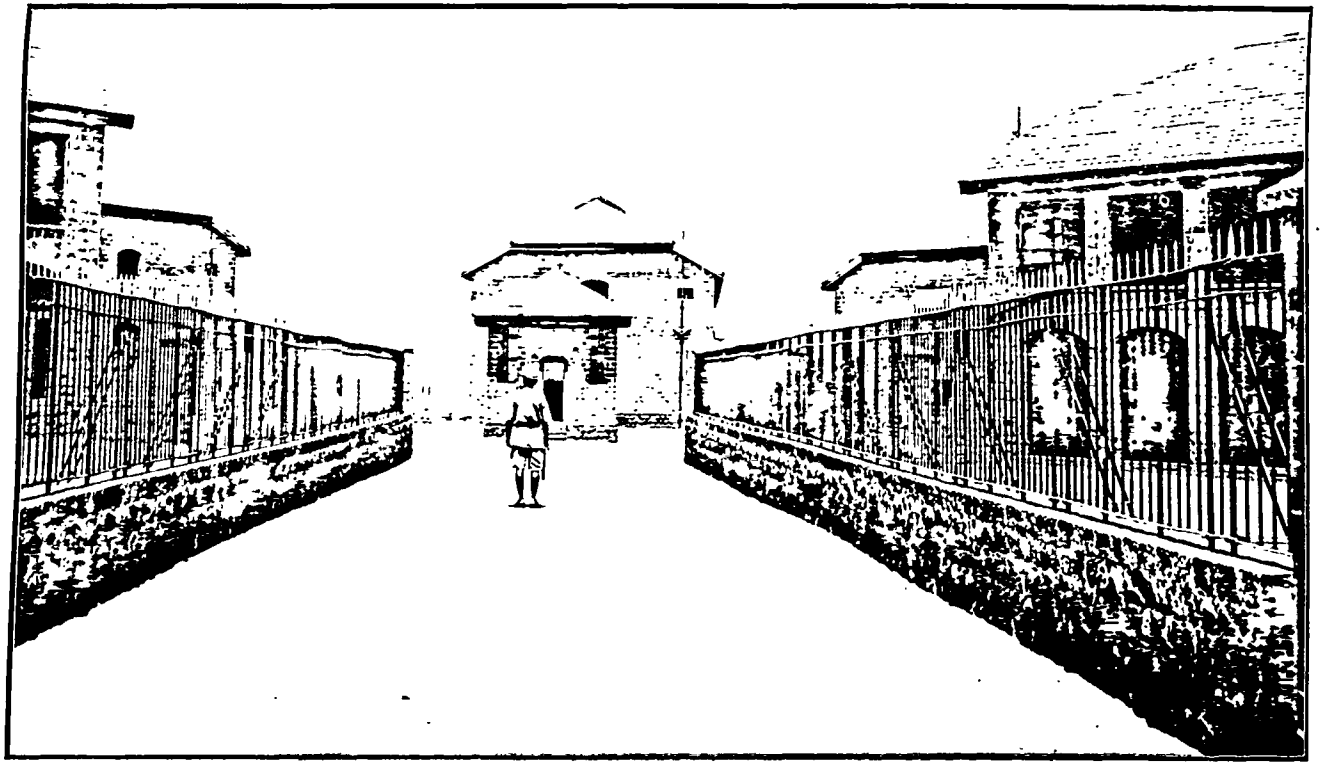
Jails and Convict Settlements—

	Rs.
On new works and additions and alterations to existing works	10,72,738§
On repairs	34,089
Total ..	11,06,827

*Includes Rs. 40,015 expenditure incurred under 60, Civil Works.
†Includes Rs. 6,65,214 expenditure incurred under 60, Civil Works.
‡Includes Rs. 2,50,958 expenditure incurred under 60, Civil Works.
§Includes Rs. 10,12,739 expenditure incurred under 60, Civil Works.

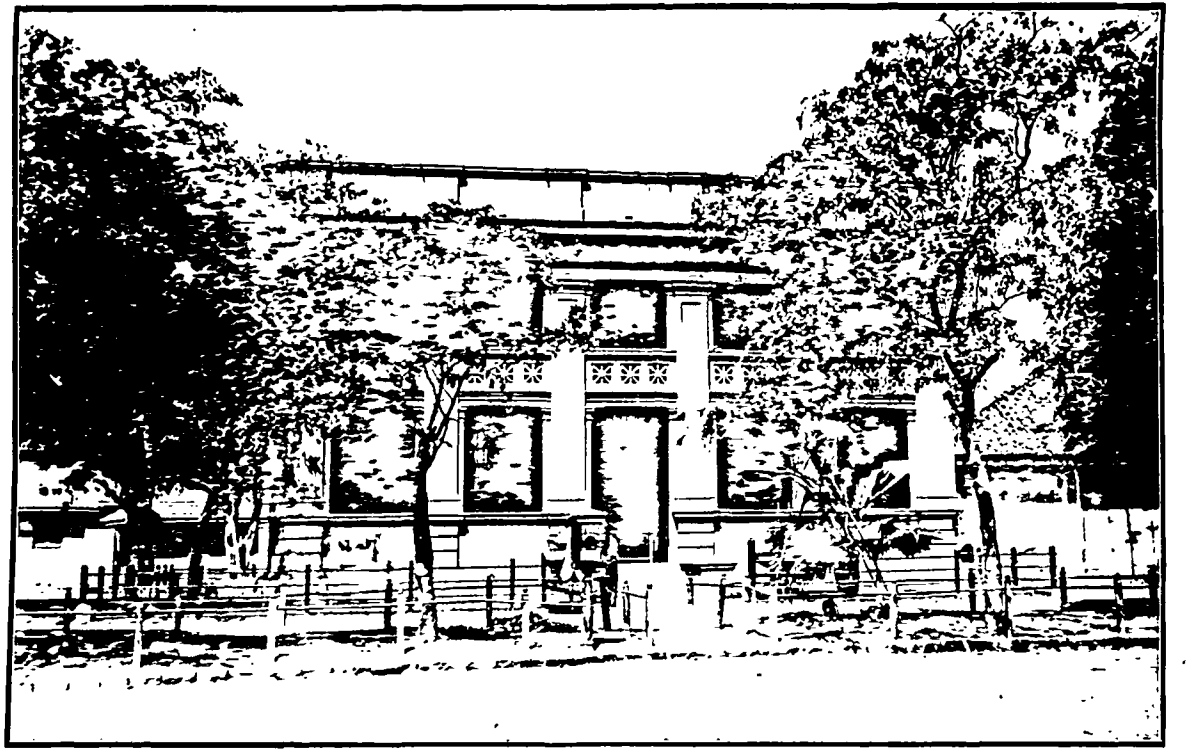


Western Bungalow at Yeravda, Poona.



Central Prison at Hindalgi (Belgaum)—Casual Circle.

Central Prison at Hindalgi (Belgaum)—Main Entrance.



Temporary Police Head Quarters at Jacob Circle, Bombay.

The Central Jail at Hindalgi which provides accommodation for 700 prisoners was completed and handed over to the Jail Department. It was opened on 3rd January 1924. A certain area of land was acquired in connection with the Central Jail at Nasik Road Station. Certain works in connection with the New Jail for undertrial prisoners at Arthur Road, Bombay, were in progress. The construction of a ward containing 8 beds with 6 Tubercle Cells in the Central Jail at Sabarmati, Ahmedabad, and tubercle wards with 3 cells in the Central Prison at Hyderabad were in progress.

Police—

	Rs.
On new works and additions and alterations to existing works	24,34,782*
On repairs	2,85,582
Total ..	27,20,364

The principal works completed or nearly so during the year were—

Additions and alterations to the—

Head Quarters Police Lines at Belgaum.

Police Lines at Malwan, Ratnagiri District.

Head Quarters Police Lines at Ratnagiri.

Cattle Pound at Girgaum, Bombay.

Police buildings at Pydhoni, Nagpada, Agripada and Jacob Circle, Bombay.

New—

Additional Head Quarter Police Lines, Ratnagiri.

Cantonment Police Lines, Poona.

Railway Police Lines at Kirkee.

Police Lines at Dhulia.

Police accommodation schemes at Mazagaon, Lamington Road, and King's Way, Matunga, Bombay.

Head Quarters Police Lines, Thana.

Police Lines at Matheran.

Railway Police Lines at Anand, Kaira District.

Railway Police Lines at Bavla, Ahmedabad District.

Quarters for one European Inspector and three Sergeants near Currency Office, Karachi.

Quarters for 7 Head Constables and 36 Constables, Karachi.

Police Lines at Khairpur Nathanshah, Sind.

*Includes Rs. 17,66,393 expenditure incurred under 60, Civil Works and Rs. 4,50,895 expenditure incurred from Contribution received from Bombay City Improvement Trust.

The principal works still in progress at the end of the year were—

Additions and alterations to the Police buildings at Dadar and DeLisle Road, Bombay.

Head Quarters Police Lines at Larkana.

New—

Cantonment Police Lines at Sowars Gate and Police Station House, Poona.

Police accommodation schemes at Byculla, Mahim and Parel, Bombay.

Police Lines at Bhiwandi, Panvel and Uran in the Thana District.

Bagdadi Police Lines, Karachi.

Quarters for 11 Constables at Hyderabad.

Harbour Police Lines, Karachi.

Police Lines at Sujawal, Sind.

Scientific Departments—Archæological Department—

An expenditure of Rs. 236 incurred under this head represents the Public Works Department share of contribution towards the Museum fund at Bijapur.

Educational.

University—

	Rs.
On new works and additions and alterations to existing works	(a)2,55,117*
On repairs	52,869
Total ..	3,07,986

Furniture and Sanitary and water fittings and other minor works such as tennis court, fire appliances, etc., were provided in the Royal Institute of Science, Bombay. A marble bust in the Sir Vasanji Trikamji Library was also provided.

Secondary—

	Rs.
On new works and additions and alterations to existing works	1,31,608†
On repairs	24,782
Total ..	1,56,390

*Includes Rs. 36,046 expenditure under 60, Civil Works and Rs. 89,508 from Deposit Contribution.

†Includes Rs. 70,725 expenditure under 60, Civil Works and Rs. 36,730 from Deposit Contribution.

(a) Includes Rs. 1,00,000 on account of refund of contribution towards the Royal Institute of Science, Bombay, to the Bombay University.

The work of constructing Navavidyalaya School at Hyderabad was in progress.

		Rs.
Primary—		
On new works and additions and alterations to existing works	..	6,336*
On repairs	..	11,852
Total	..	18,188
Special—		
On works	..	1,520
On repairs	..	25,421
Total	..	26,941
Miscellaneous—		
On new works and additions and alterations to existing works	.. (*b*)	3,934
On repairs	..	11,346
Total	..	15,280
Medical—		
On new works and additions and alterations to existing works	..	16,83,640†
On repairs	..	2,63,234
Total	..	19,46,874

The principal works completed or nearly so during the year were—

Additions and alterations to Goculdas Tejpal Native General Hospital, Bombay.

New—

Conversion of the New Tubercular Ward into a two storeyed building to provide additional accommodation for maternity cases at Cama and Albless Hospitals, Bombay.

Pharmacological Laboratory, Parel, Bombay.

Additional accommodation for criminal and non-criminal lunatics in the Mental Hospital, Naupada, Thana District.

*Includes Rs. 3,000 expenditure under 60, Civil Works.

†Includes Rs. 4,97,668 expenditure incurred under 60, Civil Works and Rs. 8,98,182 from Deposit Contributions.

(*b*) Includes Rs. 1,500 expenditure under 60, Civil Works.

Out-patients Department in the compound of Sir J. J. Hospital, Bombay.

Block of 24 paupers in the female ward in the Mental Hospital, Naupada.

Additional ward of 16 beds in the Mental Hospital, Naupada.

Civil Surgeon's bungalow at Alibag, Thana District.

The principal works still in progress at the end of the year were—

Additions and alterations to the Central Mental Hospital at Yeravda.

Infectious Diseases Hospital, Poona.

New—

Quarters for Nurses in the Civil Hospital, Bijapur.

Dispensary building at Gokarn, Kanara District.

Accommodation for female lunatics at the Central Mental Hospital, Yeravda.

King Edward Memorial Hospital, Sholapur.

King Edward Memorial Hospital, Parel, Bombay.

Public Health—

	Rs.
On new works and additions and alterations to existing works	19,977
On repairs	30,411
Total ..	50,388

Agriculture—

	Rs.
On new works and additions and alterations to existing works	72,257
On repairs	19,982
Total ..	92,239

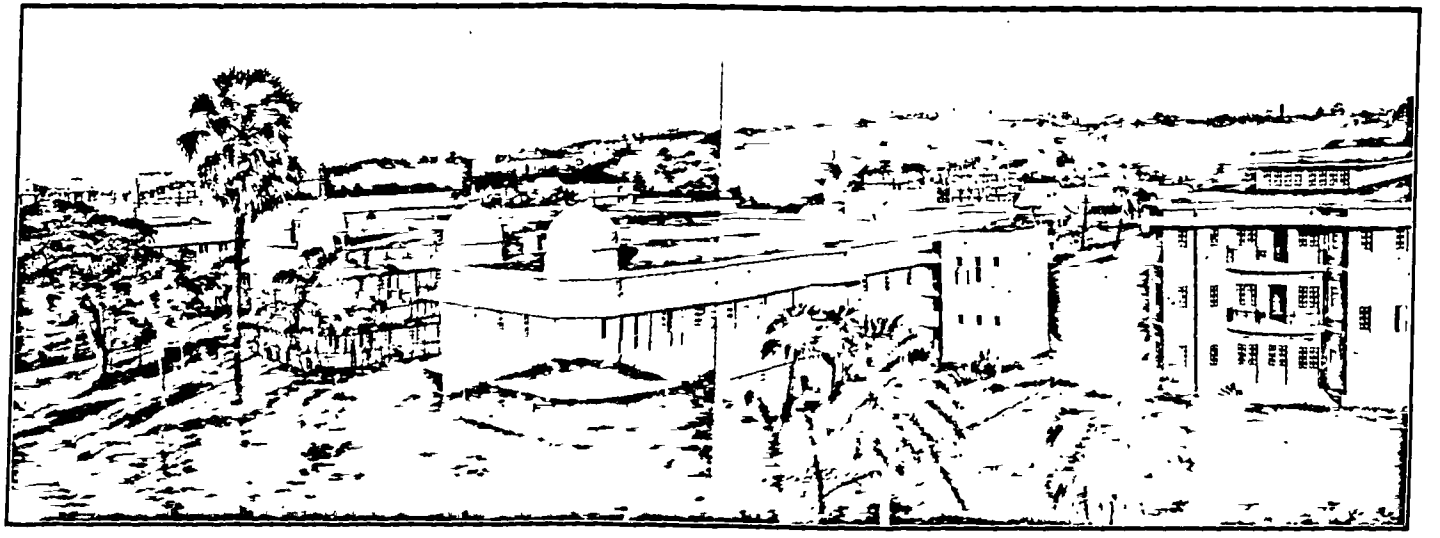
Buildings for the New Lazaretto at Parel, Bombay, and Agricultural Farm Buildings at Karjat in the Kolaba District were completed.

Civil Works—

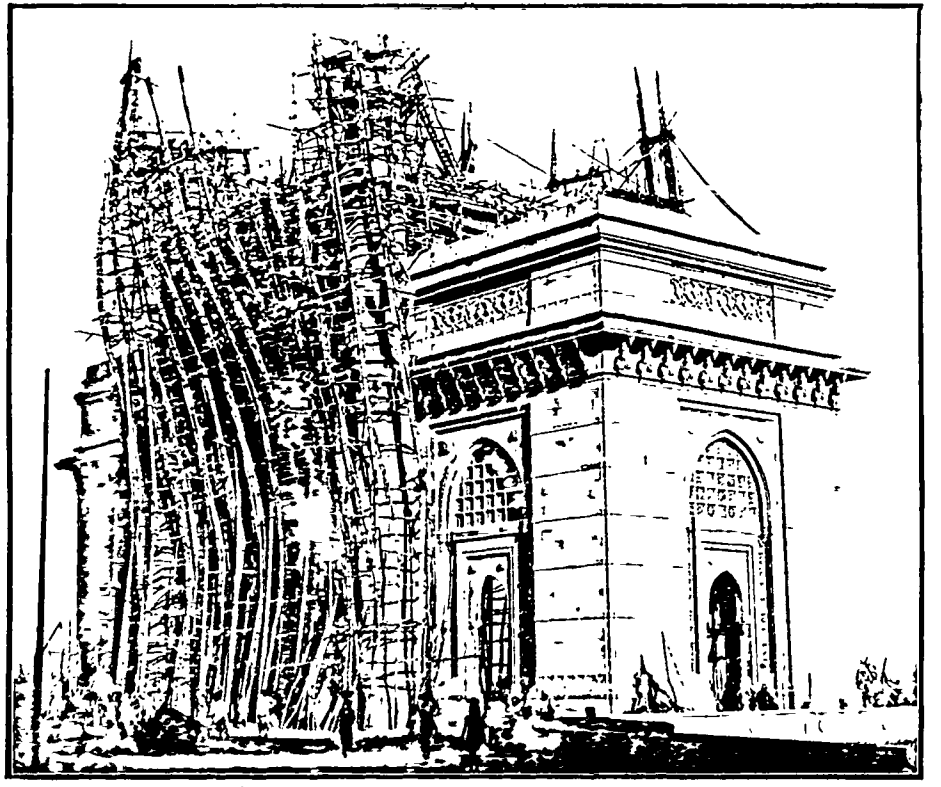
	Rs.
On new works and additions and alterations to existing works	4,69,025*
On repairs	3,06,188
Total ..	7,75,213

Additions and alterations to the ground floor of the Old Customs House in Bombay to render it suitable for the accommodation of the

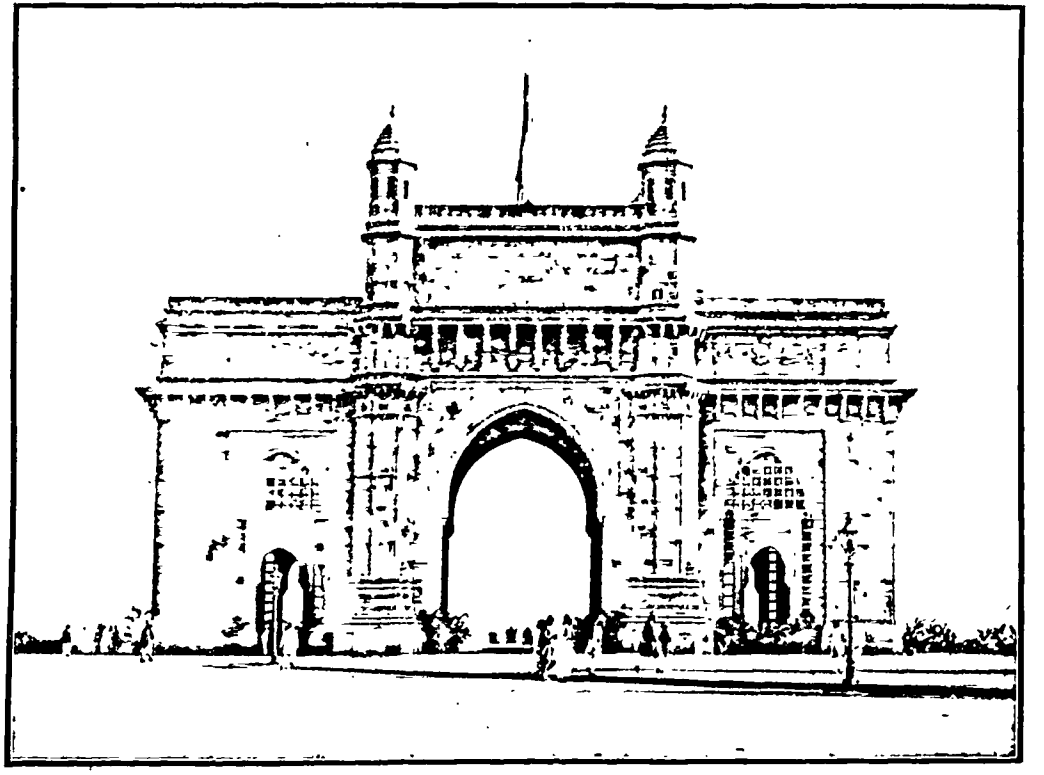
* Includes Rs. 3,19,813 expenditure incurred under 60. Civil Works.



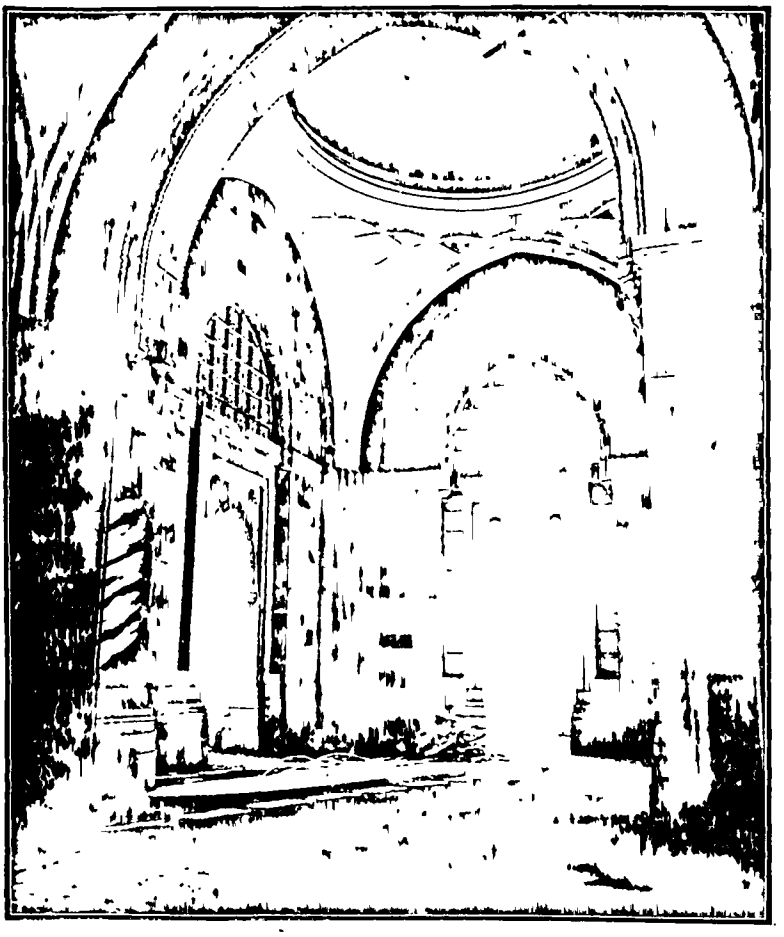
General View of Two Ward Pavilions of the King Edward VII Memorial Hospital, Parel, Bombay.



Gateway of India—Detail of Exterior.



Gateway of India– Exterior.



Gateway of India—Interior.

office of the Sub-Registrar and Government Printing Stores were carried out.

	Rs.
Stationery and Printing—	
On new works and additions and alterations to existing works	78,780
On repairs	18,230
Total ..	97,010

Miscellaneous Department—	Rs.
On new works and additions and alterations to existing works	3,16,106*
On repairs	5,178
Total ..	3,21,284

The construction of an Historical Museum and Library at Satara was in progress as also was the "Gateway of India" at the Apollo Bunder, Bombay. In the case of the latter masonry work was brought up to a height of about 70 feet. All the inner arches were finished and the work of fixing ornamental corbels was completed to a height of 56 feet. The construction of public buildings on the Artillery Maidan, Karachi, was also in progress.

Central Workshops, Dapuri.

Much time and thought has been devoted to the shops and the production of work has been greatly increased while many improvements have been introduced tending to economy and to increase the standard of workmanship and efficiency. These workshops have been recognized as Central Workshops for all departments. The Agricultural Engineer's Workshop has been closed down and the work transferred to Dapuri with an annual saving of Rs. 30,000. Old machinery is taken in from the districts, overhauled and kept ready to send out and this side of the work at Dapuri is most valuable. Useful work has been done for the Irrigation Department in evolving new gates for distributary inlets and outlets with simple means of rating. Forty apprentices are always undergoing training to become skilled workmen and Graduates from the Engineering College gain good practical experience.

B.—ARCHITECTURAL.

During the year under review, the activity in design noted in the previous year's Administration Report was maintained.

* Includes Rs. 10,615 under 11, Provincial and Rs. 3,20,751 under 60, Civil Works.

A type design for isolation wards for infectious diseases hospitals was prepared. Designs and sketch plans were made for the Shedi River Bridge Dakore, the Polo Pavilion, Poona, the Circuit House, Karachi, the Physical and Electrical Laboratory, Poona Engineering College extension, the High Court, Karachi, the Courts for the District and Assistant Judges, Nadiad, the Police quarters at DeLisle Road, Bombay, and the Judicial buildings, Dharwar.

In regard to public or institutional buildings designs were got out for the King Edward VII Memorial Hospital (Out-patients and Ophthalmic Hospital, Maternity and Nurses Home), Parel, Bombay, the Out-patient Department, Sir J. J. Hospital, Bombay, the New Poona College (Shri Krishna Prasarak Mandali), Poona, the Out-patients Department, Sassoon Hospital, Poona, the Public Works Department, War Memorial, Bombay, the Post and Telegraph Office, Poona, the extension to Goculdas Tejpal Hospital (Administration Block and the Chronic Ward), Bombay, the Ismail College, Andheri, and the proposed chattri at Raigarh Fort, Kolaba District.

C.—ELECTRICAL.

	Central.	Provincial.
	Rs.	Rs.
On new works and additions and alterations to existing works ..	3,688*	4,68,411†
On repairs	22,264	3,22,351‡
Total ..	25,952	7,90,762

The following important works were either in progress or completed :—

Electric installations in the Royal Institute of Science and Workshop, Bombay, in the New Out-patients Department, J. J. Hospital, Bombay, in the Infectious Diseases Hospital, Poona, in the passages, corridors and staircases of Police Lines, Bombay, in the quarters for eight European officers at Byculla, in the residential quarters for the City Police, Bombay, in the Mounted Police Officers' quarters and Police Lines at Byculla, in the Government bungalows, Thana, in the new Government bungalows for officers at Ahmedabad, in the King Edward Memorial Hospital at Parel and in the office of the Chief Engineer, Lloyd Barrage and Canals Construction, Karachi.

An additional refrigerating plant at the Vaccine Institute, Belgaum, a new battery at the Yeravda Power House at Yeravda, Poona, a new Refrigerating Plant at the Sir J. J. Hospital, Bombay, and an overhead line at the Government Distillery at Bassein were also provided.

* Exclusive of Rs. —9,826 expenditure incurred under 50, Military Works.

† Includes Rs. 2,72,706 expenditure incurred under 60, Civil Works and Rs. 32,710 from Deposit Contributions.

‡ Includes Rs. 1,852 expenditure incurred from Deposit Contributions.

D.—Communications.

	Rs.
On new works and additions and alterations to existing works	17,12,712*
On repairs	31,05,538
Total ..	48,18,250

The principal works in progress at the end of the year were :—

Additions and alterations or improvements to the—

Mahad-Pandharpur Road, Lonand District.

Hatkhamba-Peladpur Road
Pali-Phonda Road
Math-Kasal Road
} Ratnagiri District.

Sadashivgad-Kadra and Kumta-Hubli Roads, Kanara District.

Bombay-Poona Road
Roads and drains on the land acquired for the devlopment of the Suburb—East of Koregaon Road
Poona-Bangalore Road
Poona-Sholapur Road
Poona-Nasik Road
} Poona District.

Mahad-Pandharpur Road, Satara District.

Roads and masonry works in Forest areas in connection with the Development Scheme, Sholapur.

Bombay-Poona Road (portion from Sion to Ghatkopar), Thana District.

Bandra-Ghodbunder Road, Thana District.

Road from Navsari to Matwad, Surat and Broach District.

Jungshahi-Baghar Road in Sind.

Dhanduka-Dholera Road, Ahmedabad District.

(This road links Dholera Bandar with several villages in the interior of the taluka and also with Dhanduka which has now become an important Railway station on the Railway line from Botad to Dholera which is under construction between the interior of Kathiawar and Ahmedabad. There is every possiblity of this road being used by heavy motor traffic in the near future.)

New—

Partial bridge over the river Akra near Padegaon, Lonand District.

Causeway over the Tupari Nalla on the Dharwar-Savadatti Road in the Belgaum District.

* Includes Rs. 4,74,957 expenditure incurred under 60, Civil Works.

Bridge over the Bedthi Nalla on the Yellapur-Sirsi Road in the Kanara District.

Causeway at Ambeghargaon on the Poona-Nasik Road, Amednagar District.

Causeway over the Deo River on the Nagar-Manmad Road, Ahmednagar District.

Causeway over the Girna River near Jalgaon on Dhulia-Bhusawal Road, East Khandesh District.

Lloyd Bridge at Poona (this was opened for traffic from 1st March 1924).

Bridge on the Nira River at Sarola on the Poona-Bangalore Road, Satara District. (This work was undertaken to meet modern requirements of heavy motor traffic).

Causeway over the river Bhima at Pandharpur, Sholapur District.

Waghunda Bridge on the Poona-Ahmednagar Road.

Road from Salun to Umreth and Dakore to Umreth, Kaira and Panch Mahals District.

To alleviate distress in the Gadag, Navalgund and Ron talukas of the Dharwar District where scarcity prevailed a causeway over the Meundi nalla on the Gadag-Hesrur Road was started. For the same reason causeways over the Malprabha River at Govankop on the Sholapur-Hubli Road and on the Hullur Nalla on the Mudebihal-Chimalgi Road and diversion of nalla near Guledgud in Bijapur District were undertaken.

A part instalment (*viz.*, Rs. 1,00,000) of the Government contribution of Rs. 5,00,000 towards the cost of constructing a new bridge across the Bassein Creek at Kasheli to carry water mains was paid to the Municipal Commissioner, Bombay.

Arboriculture.—Nurseries were maintained at various places and the planting, watering and protection of roadside trees continued to receive careful attention. About 26,000 trees were planted during the year along Provincial and Local Fund roads in charge of this Department.

E.—Miscellaneous.

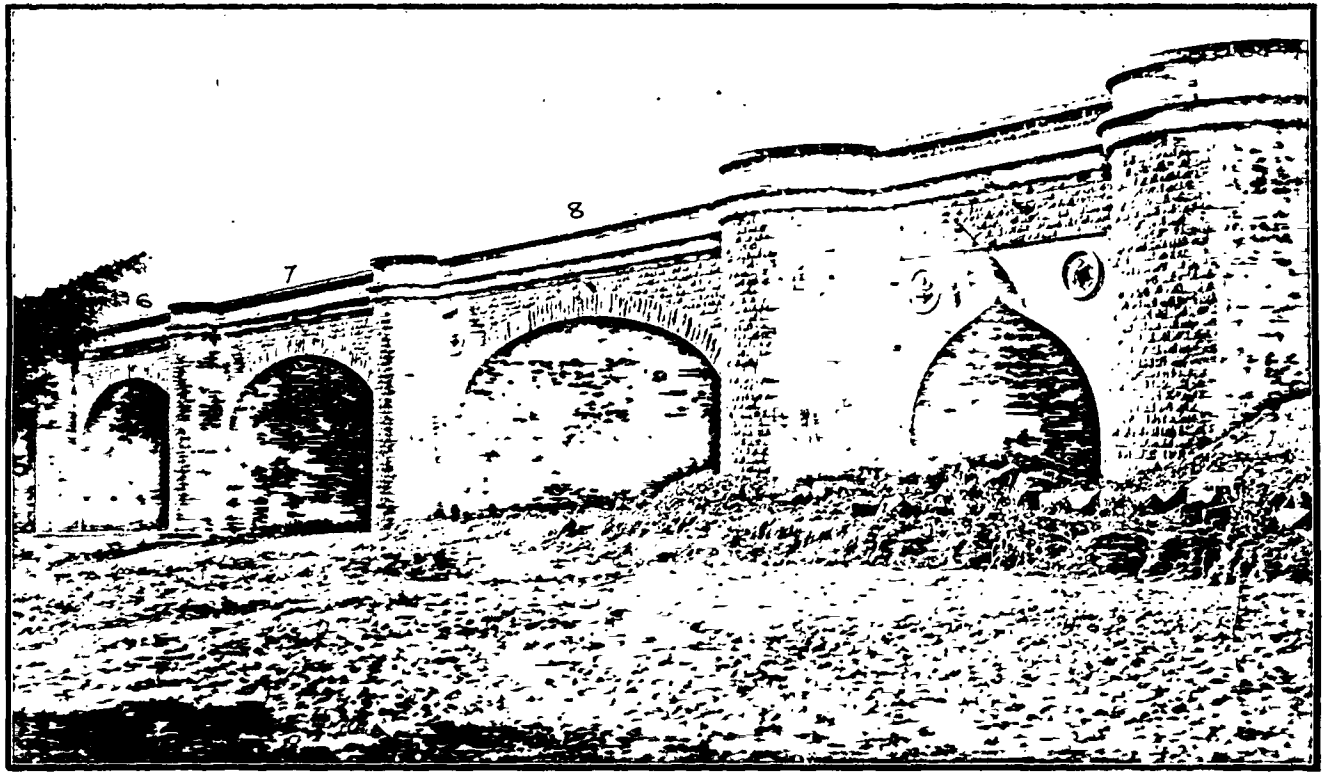
Water Supply—

	Rs.
On new works and additions and alterations to existing works	6,64,600*
On repairs	1,42,072‡
Total ..	8,06,672

The work of improvements to Sukkur Water Works was in progress.

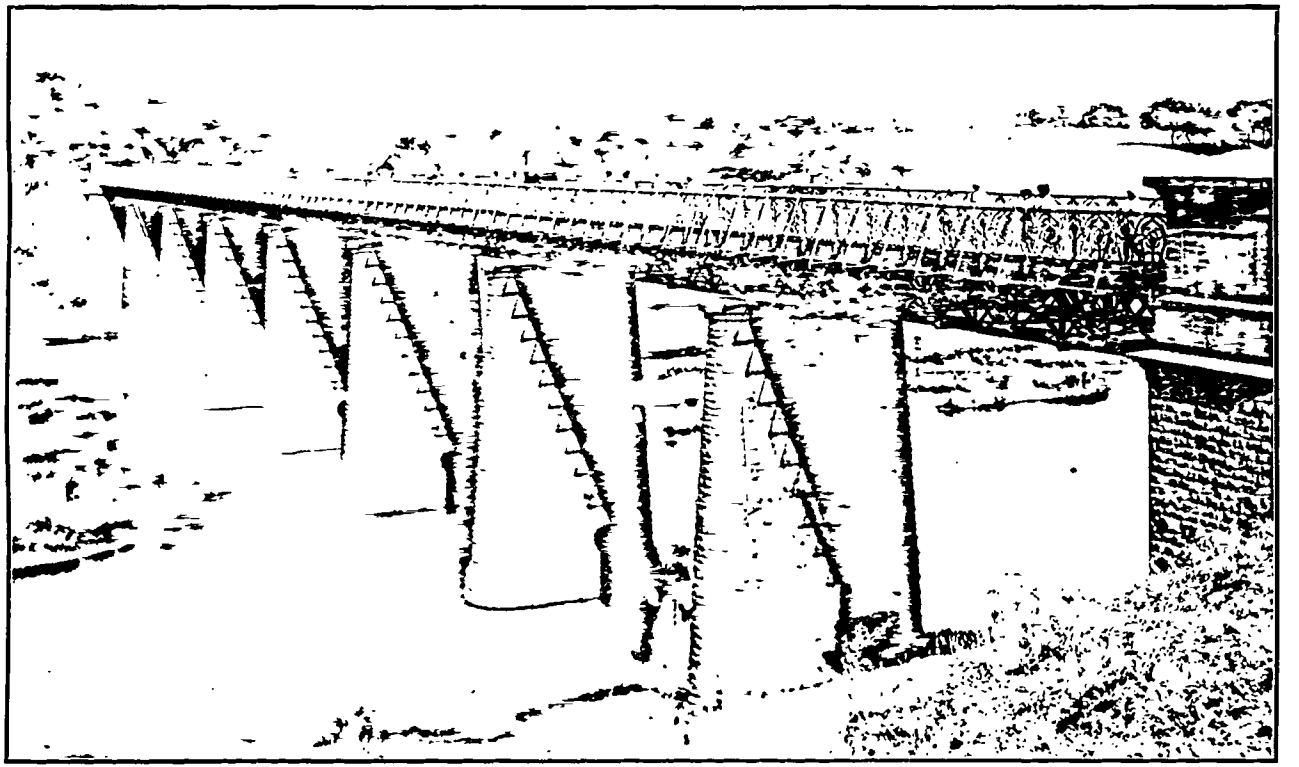
* Includes Rs. 1,59,432 expenditure incurred under 60, Civil Works and Rs. 4,83,311 from Deposit Contributions.

‡ Includes Rs. 1,63[illegible] expenditure incurred from Deposit Contributions.



LLOYD BRIDGE—POONA.

Span Nos. 5, 6, 7 and 8, and Bhamburda Side Sarasenic Arch 20′ Span.



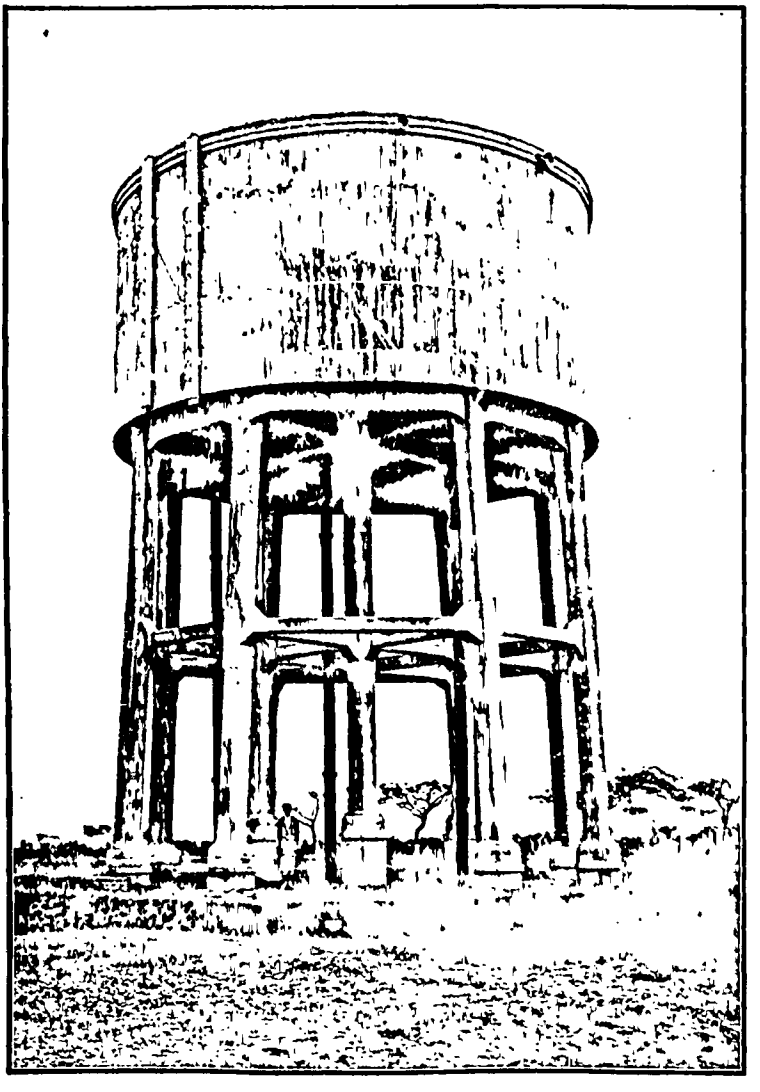
THE NIRA BRIDGE.

8 Spans of 57′-6″ clear.

Strengthened with New Girders and Horbury's Arched Plates.

Begun October 1923. Completed December 1924.

Side View of Bridge Looking from Satara End, from Upstream Side.



Reinforced Concrete Water Tank of 100,000 Gallons Capacity at Yeravda, Poona.

Improvements to the Pandharpur Water Works (an additional service reservoir and an infiltration gallery in the river) were in progress.

Improvements to the Nasik Distillery Water-supply.—These works which included 10,300 feet of 6 inches cast iron main from Chehedi to the distillery including a nala crossing, additions and alterations to the pump at Chehedi and clearing the well and roughing filters at Chehedi were carried out and handed over to the Excise Department.

Nasik Distillery spent wash works.—The works commenced last year were all completed and several additional works were carried out during the year.

Yeravda (Poona Water-supply).—For improving the supply to Yeravda and the Koregaon Road Estate a new 9 inches main about 18,000 feet long was in progress between the existing High Service Reservoir in the Cantonment and a new reinforced concrete elevated balancing tank of 1,00,000 gallon capacity at Yeravda, about two-thirds of the main being laid and the elevated tank practically completed.

Hindalgi Jail Water-supply.—The laying of the 4 inches rising main and distribution pipes and the construction of the service reservoir infiltration gallery Jack well 20 feet in diameter and pumping station were completed.

Poona City Water-supply.—A bye-pass channel in one of the settling tanks at the Sowar Gate was constructed. A venturi meter with recorder house was installed at the head of the city mains.

Thana Water-supply.—Work was in progress at the Pokharn Tank with the object of stopping leakage through the dam.

Improvements to Hyderabad water works were in progress.

About 17 schemes for water-supply and drainage were under investigation in the sub-divisions during the year. Larkana drainage, Sukkur Barrage township water-supply and drainage, Gokak water-supply and Ahmedabad Cantonment water-supply projects were prepared during the year.

During the year boring operations in connection with water-supply by power and hand boring machines were conducted at Aden, Chanchwel Broach District, Karachi (Drigh Road), Karachi Farm, Nandurbar West Khandesh District and Sitapur, Tajpur, Dhandhuka and Detroj in the Ahmedabad District.

Drainage, Hindalgi Jail.—The works in connection with the water carriage sewerage system with water closets, water flushed urinals manholes, inspection chambers, settling tanks, etc., were practically completed.

Bombay Development—	Rs.
On works	2,624
On repairs	1,741
Total ..	4,365

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Special.

An expenditure of Rs. 6,183 was incurred for erecting a Shamiana including seating accommodation at the Apollo Bunder on the occasion of the departure of His Excellency Sir George Lloyd on 8th December 1923 and the arrival on 10th December 1923 of Lieut.-Col. the Right Honourable Sir Leslie Orme Wilson, Governor Designate of Bombay.

Famine—No regular famine works were opened during the year but ordinary public works were started to alleviate distress owing to scarcity conditions prevailing in parts of the Dharwar and Bijapur districts.

APPENDIX I.

APPENDIX

Statement of Expenditure on Civil and

Service Heads.	Original Works.			
	Grant.	Outlay.		
		As per accounts for March 1924 Final.	Subsequent adjustments by journal entries.	Total.
1	2	3	4	5
43, Famine Relief and Insurance. A Famine Relief.	Rs.	Rs.	Rs.	Rs.
Buildings and Roads ..	....	....	....	....
Total, 43, Famine ..	....	....	....	....
50, Military Works.				
Works including Barrack Department	45,588	40,730 (a) 5,000	....	40,730 (a) 5,000
Establishment	....	....	....	....
Tools and Plant ..	....	....	....	....
Suspense	....	....	....	....
Deduct—English cost of stores	....	....	....	....
Loss or gain by Exchange ..	....	....	....	....
Expenditure in England ..	....	....	....	....
Total, Military Works ..	....	....	....	....
41, Civil Works Central.				
Buildings	2,50,000	2,38,998	....	2,38,998
Communications ..	....	....	....	....
Miscellaneous	....	....	....	....
Establishment	....	....	....	....
Tools and Plant ..	....	....	....	....
Suspense	....	....	....	....
Deduct—English cost of stores	....	....	....	....
Loss or gain by Exchange ..	....	....	....	....
Expenditure in England ..	....	....	....	....
Total, 41, Central .	....	....	....	....

(a) Adjustment communicated in the 3rd Supplementary

I.

Military Works during 1923-24.

Repairs.				Total.			
	Outlay.				Outlay.		
Grant.	As per accounts for March 1924 Final.	Subsequent adjustments by journal entries.	Total.	Grant.	As per accounts for March 1924 Final.	Subsequent adjustments by journal entries.	Total.
6	7	8	9	10	11	12	13
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..
1,24,309	1,26,298	..	1,26,298	1,69,897	1,67,028 (a) 5,000	..	1,67,028 (a) 5,000
..	..	..	..	18,653	563 (a) 975	38,327	38,890 (a) 975
..	..	..	..	1,202	21 (a) 173	1,739	1,760 (a) 173
..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..
..	..	..	..	1,89,752	1,67,012 (a) 6,148	40,066	2,07,078 (a) 6,148
2,51,016	2,44,302	..	2,44,302	5,10,016	4,83,300	..	4,83,300
..	3,193	..	3,193		3,193	..	3,193
	488		488		488	..	488
..	..	..	..	1,08,824	69,380	—1,488	67,892
..	..	..	..	7,500	1,538	2,321	3,859
..	..	..	..	..	405	—36	369
.	.	..	..	..	36	—36	..
..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..
..	..	..	..	9,26,400	5,58,208	833	5,59,101

Accounts for March 1923 not accepted during the year 1922-23.

Service Heads.	Original Works.			
	Grant.	Outlay.		
		As per accounts for March 1924 Final.	Subsequent adjustments by journal entries.	Total.
1	2	3	4	5
	Rs.	Rs.	Rs.	Rs.
41, Civil Works Provincial.				
Buildings	15,34,913	14,22,717	....	14,22,717
Communications ..	12,94,141	12,37,590	165	12,37,755
Miscellaneous	25,000	21,857	....	21,857
Establishment	....	....	....	....
Tools and Plant ..	....	....	....	....
Grants-in-aid	....	....	....	....
Suspense	....	....	....	....
Deduct—English cost of Stores.	....	....	....	....
Loss or gain by Exchange ..	....	....	....	....
Establishment	....	....	....	....
Stores	....	....	....	....
Expenditure in England ..	....	....	....	....
Establishment	....	....	....	....
Stores	....	....	....	....
Total, 41 Provincial ..	....	....	....	....
60, Civil Works.				
Buildings		50,66,810	....	50,66,810
Communications ..	84,43,000	4,74,957	....	4,74,957
Miscellaneous		1,59,432	....	1,59,432
Establishment	....	....	....	....
Tools and Plant ..	....	....	....	....
Total, 60, Civil Works ..	....	....	....	....
District Local Funds ..	....	....	....	....
Deposit Contributions ..	....	....	....	....
Grand Total ..	....	....	....	....

I—*contd.*

Repairs.				Total.			
	Outlay.				Outlay.		
Grant.	As per accounts for March 1924 Final.	Subsequent adjustments by journal entries.	Total.	Grant.	As per accounts for March 1924 Final.	Subsequent adjustments by journal entries.	Total.
6	7	8	9	10	11	12	13
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
..	17,71,735	..	17,71,735		31,94,452	..	31,94,452
51,72,763	31,05,538	..	31,05,538	80,26,817	43,43,128	165	43,43,293
..	5,732	..	5,732		27,589	..	27,589
..	..	..	..	23,18,210	25,84,201	—9,99,713	15,84,488
..	..	..	..	4,85,421	4,23,642	—57,724	3,65,918
..	..	..	..	2,08,109	7,47,489	..	7,47,489
..	..	..	..	4,45,932	—2,22,066	..	—2,22,066
..	..	..	..	3,74,000	3,60,383	—2	3,60,381
..	..	..	..	..	..	..	..
..	..	..	..	1,91,000	50,398	—1	50,397
					60,377	—2	60,375
..	..	..	..	..	..	..	..
..	..	..	..	1,30,000	1,09,969	..	1,09,969
..	..	..	..	2,40,000	1,39,646	..	1,39,646
..	..	..	..	1,16,80,579	1,10,98,442	—10,57,273	1,00,41,169
..	..	..	..		50,66,810	..	50,66,810
..	..	..	..	84,43,000	4,74,957	..	4,74,957
..	..	..	..		1,59,432	..	1,59,432
..	..	..	..	17,93,745	54,988	7,55,707	8,10,645
..	..	..	..	1,25,255	4,203	54,106	58,309
..	..	..	..	1,03,62,000	57,60,340	8,09,813	65,70,153
..	..	..	..	..	7,01,804	..	7,01,804
..	..	..	..	..	29,70,651	..	29,70,651
..	..	..	..	..	2,12,57,117	—2,06,561	2,10,50,556
					(a) 6,148		(a) 6,148

(a) Adjustment communicated in the 3rd supplementary accounts for March 1923, not accepted during the year 1922-23.

J. STUART MILNE,
Accountant General.

APPENDIX

Statement of Roads not within municipal boundaries, giving lengths of Local authorities, respectively,

Name of Division.	Name of District.	Length of metalled roads maintained by the P.W.D.		Length of unmetalled roads maintained by the Public Works Department.		Length of metalled roads maintained by Local authorities.	
1	2	3		4		5	
		M.	Ft.	M.	Ft.	M.	Ft.
Northern Division..	Thana	(a) 463	2,574	(a) 5	3,300	(a) 267	3,781
	Surat	(b) 166	902	(b) 21	5,163	(b) 94	4,475
	Broach	(c) 54	525	0	0	28	770
	Kaira	(d) 205	1,022	(d) 21	3,072	7	300
	Panch Mahals ..	167	4,933	22	3,300	(e) 5	426
	Baroda Cantonment ..	3	4,300	0	0	0	0
	Ahmedabad ..	164	2,022	88	3,130	19	2,265
Central Division ..	Poona	436	1,546	(g) 75	3,890	0	0
	Government House ..	(h) 25	1,560	0	0	0	0
	Satara	(i) 426	961	(i) 46	330	207	2,970
	Sholapur	(j) 305	174	(j) 0	0	(j) 10	4,733
	Ahmednagar ..	(k) 320	3,953	17	0	(k) 388	3,235
	Nasik	(l) 608	3,081	(l) 27	1,206	(l) 25	15,88
	East Khandesh ..	426	2,941	10	660	60	4,910
	West Khandesh ..	(m) 358	3,558	(m) 8	1,980	(m) 9	4,620

Note.—The lengths of Provincial roads included in columns 3 and 4 in the above statement are
Presidency are not now required to contribute towards the maintenance of Provincial roads passing

(*a*) The increases in columns 3, 4 and 9 are due to the transfer of certain roads to the Thana The increase in column 5 is partly due to the conversion of certain unmetalled lengths into Kolaba Collectorate lying in the Thana Public Works Department District owing to the unmetalled roads during the year and partly to the inclusion of certain lengths of roads in closure of the late Kolaba District.

(*b*) The decreases in columns 3 and 4 are due to the resumption of certain lengths of Local certain roads having been resumed by the Board during the year and partly to certain

(*c*) The decrease in column 3 is due to a portion of the Broach Jambusar road having been

(*d*) The increase in column 3 and decrease in column 4 are due to certain unmetalled lengths

(*e*) The increase in column 5 and decrease in column 6 are due to certain unmetalled lengths

(*f*) The decrease is due to the extra Municipal and Kelupur roads having been handed over to

(*g*) The decrease in column 4 is due to the transfer of a certain length of Local Board roads minor roads serving single villages having been brought on the list of roads by the

(*h*) The decrease in column 3 is due to the exclusion of certain roads passing through

(*i*) The increase in column 3 and the decrease in column 4 are due to the metalling of certain

(*j*) The decreases in columns 3 and 4 are due to the transfer of certain District Local Board transfer of certain Local Board roads to the District Local Board and partly to the constructed roads. The decrease in column 9 is due to the permanent transfer of a certain metalling of a certain portion of unmetalled roads.

(*k*) The decrease in column 3 and the increase in column 5 are due to the transfer of certain classification namely "metalled" of certain District Local Board roads which were of unmetalled roads and also to the adoption of correct lengths.

(*l*) The decreases in columns 3 and 4 and the increases in columns 9 and 10 are due to the to certain Taluka Local Board roads having been brought on the list.

(*m*) The increase in column 3 and the decrease in column 4 are due to the metalling of

II.

metalled and unmetalled roads maintained by the Public Works and during the year 1923-24.

Length of unmetalled roads maintained by Local authorities.		Total length of metalled roads.		Total length of unmetalled roads.		Remarks.				
						Metalled roads maintained by the P.W.D. in Municipal limits.		Unmetalled roads maintained by the P.W.D. in Municipal limits.		
6		7		8		9		10		
M.	Ft.	M.	Ft.	M.	Ft.		M.	Ft.	M.	Ft.
(a) 290	292	731	1,075	295	3,592	(a)	11	2,046	0	0
(b) 232	16	261	97	253	5,179		0	0	0	0
52	2,640	82	1,295	92	2,640		1	1,020	0	0
6	492	212	1,322	27	3,564		9	4,345	0	0
(c) 9	1,320	173	79	31	4,020		1	1,080	0	0
0	0	3	4,300	0	0		0	0	0	0
265	1,344	183	5,187	353	4,474	(f)	0	0	0	0
(g) 1,044	675	436	1,546	1,119	4,565		29	3,624	0	3,970
0	0	25	1,560	0	0	(h)	7	4,380	0	0
931	4,290	633	3,031	977	4,620		15	2,009	3	1,320
(j) 483	3,300	324	4,907	483	3,300	(j)	9	636	(j) 0	920
(k) 310	1,320	718	1,908	327	1,320		1	0	0	0
(l) 339	4,290	633	4,644	367	216	(l)	17	2,261	(l) 1	180
208	3,675	487	2,571	278	4,335		24	715	0	3,960
579	1,320	368	2,898	587	3,300		4	2,640	0	0

exclusive of the portions passing through Municipal limits. The Municipalties in the Bombay through their limits and the lengths of these are shown in the "Remarks" column.

District from the late Kolaba District since its amalgamation with the Thana and Ratnagari District. metalled ones by the Board and partly to the inclusion of certain lengths of roads in the portion of the closure of the late Kolaba District. The increase in column 6 is due partly to the construction of new the portion of the Kolaba Collectorate in the Thana Public Works Department District owing to the

Board roads by that body during the year. The increases in columns 5 and 6 are partly due to additional lengths having been taken up by the Board.

transferred to the Municipality for maintenance.

having been metalled during the year.

having been metalled.

the Ahmedabad Municipality for maintenance.

to the District Local Board for maintenance. The increase in column 6 is due to the inclusion of certain Taluka Local Board.

Municipal limits. They have now been correctly entered in column 9.

unmetalled portions.

roads to the District Local Board for maintenance. The increase in column 5 is due partly to the metalling of certain unmetalled portions. The increase in column 6 is due to the inclusion of newly length of Provincial road to the District Local Board for maintenance and that in column 10 to the

Provincial roads to the District Local Board for maintenance and also to the adoption of the correct previously shown as "unmetalled". The decrease in column 6 is due to the correct classification

change in the Municipal boundary of the Nasik Municipality. The increases in columns 5 and 6 are due

certain unmetalled portion.

APPENDIX

Name of Division.	Name of District.	Length of metalled roads maintained by the P.W.D.		Length of unmetalled roads maintained by the Public Works Department.		Length of metalled roads maintained by Local authorities.	
1	2	3		4		5	
		M.	Ft.	M.	Ft.	M.	Ft.
Deccan Irrigation Division.	Poona Irrigation ..	62	845	1	3,300	0	4,290
	Lake Whiting ..	16	3,705	1	5,087	0	0
	Lonand	38	4,028	0	0	0	0
	Malsiras	124	4,613	76	1,068	0	0
Southern Division ..	Belgaum	(*n*) 379	1,646	(*n*) 17	4,910	(*n*) 191	4,626
	Dharwar	(*o*) 349	945	(*o*) 77	1,045	(*o*) 379	4,049
	Bijapur	(*p*) 305	2,283	(*p*) 113	2,881	130	260
	Ratnagiri	(*q*) 500	639	19	3,960	(*q*) 293	3,255
	Kanara	(*r*) 390	2,746	312	5,212	43	2,957
Indus Left Bank Division.	Nasrat Canals District.	2	523	96	0	0	0
	Hyderabad Canals ..	(*s*) 4	660	(*s*) 123	526	(*s*) 5	0
	Fuleli Canals District ..	3	2,640	56	2,640	2	3,960
	Eastern Nara District ..	0	0	(*t*) 114	660	0	0
	Jamrao Canal Northern District.	0	0	273	1,320	0	0
	Jamrao Canal Southern District.	0	0	(*v*) 690	0	0	0
Indus Right Bank Division.	Karachi Canals ..	18	2,640	0	0	9	2,640
	Karachi Buildings ..	29	3,055	94	0	6	3,960
	Western Nara ..	5	0	17	0	0	0
	Ghar Canals ..	0	0	0	0	0	3,600
	Shikarpur Canals ..	(*x*) 0	4,884	(*x*) 22	3,750	12	4,455
	Begari Canals ..	0	0	(*y*) 30	2,280	0	0
	Grand Total ..	6,372	2,164	2,4 3	2,210	2,211	3,160

(*n*) The decrease in column 3 is due to certain lengths transferred to the Bijapur District. In column 6 are due to certain lengths having been metalled. The increase in column 9 is

(*o*) The decreases in columns 3 and 4 and the increases in columns 5 and 6 are due to certain

(*p*) The increases in columns 3 and 4 are due to transfer of certain lengths from the Belgaum

(*q*) The increases in columns 3, 5, 6 and 9 are due to certain lengths transferred from the

(*r*) The decrease in column 3 is due to certain lengths transferred to the Kanara District.

(*s*) The increase in column 3 and the decrease in column 4 are due to certain lengths having Municipality.

(*t*) The increase in column 4 and the decrease in column 6 are due to the lengths now correctly

(*u*) The increase in column 4 is due to correct lengths now shown.

(*v*) The increase in column 4 is due to the construction of a new road during the year.

(*w*) The increase in column 6 is due to a new road having been constructed.

(*x*) The increases in columns 3 and 4 are due to correct figures now shown.

(*y*) The decrease in column 4 is due to certain lengths having been transferred to the

II—*contd.*

Length of unmetalled roads maintained by Local authorities.		Total length of metalled roads.		Total length of unmetalled roads.		Remarks.				
						Metalled roads maintained by the P.W.D. in Municipal limits.		Unmetalled roads maintained by the P.W.D. in Municipal limits.		
6		7		8		9		10		
M.	Ft.	M.	Ft.	M.	Ft.		M.	Ft.	M.	Ft.
0	0	62	5,135	1	3,300		0	0	0	0
0	0	16	3,705	1	5,087		0	0	0	0
0	0	38	4,028	0	0		0	0	0	0
0	0	124	4,613	76	1,068		3	2,617	0	0
(*n*) 239	3,505	571	992	257	3,135	(*n*)	10	1,360	0	0
219	2,106	728	4,094	296	4,051	(*o*)	12	2,636	5	1,194
441	3,840	435	2,543	555	1,441	(*p*)	6	3,672	0	0
(*q*) 957	3,339	793	3,894	977	2,019	(*q*)	17	4,643	0	0
461	4,505	434	423	774	4,437		15	5,174	8	2,684
921	3,274	2	523	1,017	3,274		0	0	0	0
610	1,320	(*s*) 0	660	733	1,846		0	0	0	0
762	1,320	6	1,320	818	3,960		0	0	0	0
(*t*) 2,414	0	0	0	2,528	660		0	0	0	0
(*u*) 226	1,320	0	0	490	2,640		0	0	0	0
235	2,640	0	0	925	2,640		0	0	0	0
957	3,960	28	0	957	3,960		0	0	0	0
160	1,320	36	1,735	254	1,320		0	0	0	0
1,638	4,700	5	0	1,655	4,700		0	0	0	0
(*w*) 715	2,818	0	3,600	745	2,818		0	0	0	0
1,241	2,167	13	4,059	1,264	637		0	0	0	0
1,067	2,640	0	0	1,097	4,620		0	0	0	0
18,154	1,108	8,584	344	20,037	3,318		209	4,418	19	3,677

The decrease in column 4 is due to actual measurements. The increase in column 5 and the decrease due to certain lengths taken over from the Municipalities.

lengths transferred to the District Local Board.

District. The increase in column 9 is due to certain lengths transferred to the Municipality.

Kolaba District.

metalled. The decreases in columns 5 and 7 due to certain lengths having been transferred to the

shown.

Municipality.

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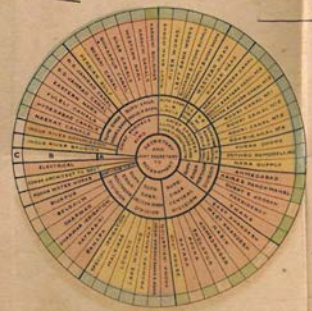
BOMBAY PRESIDENCY

PUBLIC WORKS DEPARTMENT
DISTRICT MAP
1923-24.

Scale—105 Miles to 1 Inch



Secretary & Joint Secretary ..... are Chief Engineers
Administrative Circle 'A' ..... } bars Permanent Divisions & Districts Red
Executive District Circle 'B' ..... } Temporary do & do Yellow
Circle 'C' shows nature of Executive District in Circle 'B' as follows — Roads & Buildings, Districts (a) Green
Irrigation do (b) Blue
Mixed a, & b & Miscellaneous do White

DIAGRAM SHOWING PUBLIC WORKS DEPARTMENT ADMINISTRATION

DECCAN IRRIGATION DIVISION

A Kaira & Ahmedabad Irrigation
B Prarara Canals
C Poona Irrigation
D Lake Whiting
E Lonand
F Mahirav

Jurisdiction of Sanitary Engineer — Whole Presidency
Consulting Architect ..... Do .....
Electrical Engineer ..... Do .....

BALUCHISTAN
RAJPUTANA AGENCY
ARABIAN SEA
CENTRAL INDIA AGENCY
CENTRAL PROVINCES
HYDERABAD
MYSORE
Portuguese Territory
Diu I. (Port)
KARACHI BUILDINGS
PRESIDENCY DIST
BOMBAY

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on 01 February, 2020